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10/736,272	12/15/2003	Ernest Patrick Hanavan III	5760-16500	3824
35690	7590	03/08/2007	EXAMINER	
MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C. 700 LAVACA, SUITE 800 AUSTIN, TX 78701			PEIKARI, BEHZAD	
		ART UNIT		PAPER NUMBER
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SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)
	10/736,272	HANAVAN, ERNEST PATRICK
	Examiner	Art Unit
	B. James Peikari	2189

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 18 December 2006.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-19 is/are pending in the application.
4a) Of the above claim(s) 7-17 is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-6, 18 and 19 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 15 December 2003 is/are: a) accepted or b) objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) Notice of Informal Patent Application (PTO-152)
6) Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 18, 2006 has been entered.

Election/Restrictions

2. Claims 7-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on December 18, 2006.

3. Applicant's election with traverse of claims 1-6 and 18-19 in the reply filed on December 18, 2006 is acknowledged. The traversal is on the following grounds:

(a) Applicant appears to have interpreted the language "do not overlap in scope" from MPEP 806.05(d) to mean "have no overlap whatsoever". Such an interpretation is incorrect. Applicant is challenged to provide an example of at least two claims that are subcombinations usable together that have no overlap whatsoever.

Such a situation does not exist. Claims that have no overlap whatsoever are restricted as “independent inventions” (note MPEP 806.06).

To be fair, there should be a significant amount of difference between the two inventions for a restriction as subcombinations usable together to be proper. That difference must be determined to present a serious burden on the examiner, in accordance with MPEP 808.

Such a determination has been clearly established in the restriction requirement, as further explained below.

(b) With regard to the required showing of “utility other than in the disclosed combination”, applicant’s arguments hinge on the assertion that “the Examiner is merely pointing out the differences in limitation between the claims”. This is puzzling. How else should a restriction requirement be made other than by differences in limitations? In fact, differences in limitations are really the basis of all restriction practice.

(c) Applicant further argues that the claims of subcombination I do not “preclude” the freezing of backup data. However, precluding the operation of another subcombination is not a requirement of MPEP 806.05(d).

(d) Applicant also argues that “all of the independent claims in both groups can cover embodiments as described in Applicant’s disclosure that may freeze backup data”. However, restriction practice is based on the language of the claims. Applicant is no doubt well aware of the prohibitions of reading all of the disclosure into the claims.

(e) The examiner agrees that the primary classification of subcombination I, class 711, subclass 162, would need to be searched for both subcombinations. In fact,

class 711, subclass 161, and class 714, subclasses 5-8 would also need to be searched for both subcombinations. However, the examiner does not agree that the same could be said for class 714, subclass 15, which is the primary classification of subcombination II. The claims of subcombination I do *not* require a search in this subclass. This subclass is for the “snapshot” technologies, which are used to restore data to a previous point. Applicant has used the phrase “frozen image” to describe a “snapshot”, which is the purview of subcombination II.

The requirement is still deemed proper and is therefore made FINAL.

Drawings

4. The drawings are objected to because the view numbers are not in accordance with 37 CFR 1.84(u)(1). For Example, “FIG. 1” should replace “FIGURE 1”, etc. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application

must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The specification, including the title and abstract, is objected to because the description of "server-free" operation is inaccurate, for the reasons described below in section 7 of this Office action.

Correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-6 and 18-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims contain apparent contradictions regarding "server-free" backup.

Claim 1, for example, states "wherein the backup server is configured to initiate a server-free backup through the SAN fabric of said backup data" (lines 14-15). If the

backup operation is *initiated* by a backup server, then that operation most certainly not “server-free”. Perhaps applicant means “host-server-free”?

Claim Rejections - 35 USC § 102

8. The previous rejections of claims 1-4, 6 and 18-19 under 35 U.S.C. 102(e) are withdrawn due to the amendment filed on September 18, 2006.

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-6 and 18-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Trimmer et al., U.S. 2004/0153739. In addition, Tamura et al., U.S. 2002/0199073, is cited herewith as extrinsic evidence, but is not relied upon for the rejection.

(A) As per claim 1, Trimmer et al. teaches computer network storage, i.e., a storage area network (SAN) (*note Figure 2 – although the SAN is not mentioned by name, it is clear that this drawing depicts a SAN. The definition of a SAN provided in Tamura et al., paragraph [0008], lines 1-3, cited as extrinsic evidence of what constitutes a storage area network; Tamura et al. is particularly relevant as extrinsic*

evidence because it describes a system very similar to that of Trimmer et al.), the SAN comprising:

one or more host servers (i.e., “application servers”; note paragraph [0028], line 4), wherein one of the host servers comprises a backup server (note paragraph [0014], line 18);

a plurality of storage devices (note the disks in Figure 1, elements 14, 20 or 22, and in Figure 2, elements 54 and 56);

a SAN fabric comprising one or more fabric devices configured to couple the one or more host servers to the plurality of storage devices (note Figure 2);

wherein one or more of the host servers are configured to store primary data on one or more of the storage devices (note that the host application servers use a DPA to store the data Figure 1);

wherein, subsequent to the primary data being stored, one or more of the host servers are configured to initiate a backup operation of the primary data to store backup data (note the definition of “backup data” in paragraph [0010], lines 2-5, which precisely matches the definition provided by applicant) of the stored primary data on one or more of the storage devices (note paragraph [0007]); and

wherein one or more of the storage devices comprise one or more archival storage devices (note Figure 2, elements 54 and 56), and wherein the backup server is configured to initiate a server-free backup through the SAN fabric of said backup data to one or more of the archival storage devices (note, e.g., the “serverless” backup in paragraphs [0014], [0020], [0027] and [0028]).

(B) As per claim 2, wherein a data mover (e.g., *the DPA*) is configured to copy the backup data to the one or more archival storage devices in response to a server-free copy command (*note, e.g., Figure 1 or paragraph [0014]*).

(C) As per claim 3, wherein the backup server (*note paragraph [0014], line 18*) is configured to copy primary data from one of the one or more storage devices to another of the one or more storage devices to create a backup copy of the primary data (*note, e.g., paragraph [0007]*).

(D) As per claim 4, wherein the backup server is configured to initiate a third party copy (3PC) function to create a backup copy of the primary data (*as applicant discloses, a third party copy is a “server-free” copy operation, which described throughout the Trimmer et al. system as “serverless”; note, e.g., paragraphs [0014], [0020], [0027] and [0028]*).

(E) As per claim 5, wherein the backup server is configured to update a backup database in response to the completion of the server-free backup to the archival storage devices (*note the use of the backup log in paragraphs [0014] and [0030]*).

(F) As per claim 6, wherein the backup data is stored on disk drive type storage devices (*note Figure 1, elements 14, 20 or 22, and Figure 2, elements 54 and 56*).

(G) As per claim 18, note the rejection of claim 1 above.

(H) As per claim 19, note the rejection of claim 6 above.

Claim Rejections - 35 USC § 103

11. The previous rejection of claim 5 under 35 U.S.C. 103(a) is withdrawn due to the amendment filed on September 18, 2006.

12. The previous rejections of claims 7-17 under 35 U.S.C. 103(a) are withdrawn due to the election filed on December 18, 2006.

Response to Arguments

13. Applicant's arguments filed on September 18, 2006 regarding the cited prior art have been fully considered but they are not persuasive for at least the reasons noted below.

With regard to the prior art rejections of claims 7-17, these arguments are moot in view of the election submitted on December 18, 2006. In addition, applicant's final arguments regarding these claims insisted that the examiner had provided no

motivation to combine the references, even though the motivation was clearly and explicitly stated – note page 8 of the non-final rejection mailed on January 3, 2006 or page 8 of the final rejection mailed on June 13, 2006. Applicant apparently overlooked the motivation statement in both rejections.

As for the rejections based on 35 U.S.C. 102(e), applicant's basis for novelty hinged on two main points. First, applicant argued that the cited prior art did not teach that backup data written to a disk is then itself backed up to the archives. However, it is noted that this is exactly how *most* memory hierarchy worked -- only systems with built-in bypasses were able to skip a level of memory hierarchy (e.g., an L2 memory writing a copy of primary data directly to L4). Second, applicant argued that the cited prior art backup did not occur in a server-free manner. However, as shown above in section 7 of this Office action, neither does applicant's system.

14. As for applicant's arguments filed on December 18, 2006, these have been discussed in above in section 3 of this Office action.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Tamura et al. publication cited above as extrinsic evidence is actually quite relevant to the present claims. Applicant is strongly encouraged to consider this reference before formulating any response to this Office action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Peikari whose telephone number is (571) 272-4185. The examiner is generally available between 7:00 am and 7:30 pm, EST, Monday through Wednesday, and between 5:30 am and 4:00 pm on Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Reginald Bragdon, can be reached at (571) 272-4204. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center at 866-217-9197 (toll-free).



B. James Peikari
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3/5/07